Galium kamtschaticum

Boreal bedstraw

Status

Federal status: G5 N3, Not listed

NH state status: S2, Candidate; proposed for threatened status (5/03)

ME state status: S2, Special Concern

There is little information to indicate population trends either range-wide or locally.

The expert panel estimated the range-wide viability at outcome A to B now and in the next 20 years. They placed the WMNF at outcome B, though they indicated it is hard to know with so little occurrence info. We are at the southern edge of this species' range, so it is more vulnerable, but its habitat is not rare or threatened so it should be doing fine.

Distribution

Eastern North America, Washington, the Aleutian Islands, and eastern Asia. In eastern North America, it occurs in the northern boreal woods from Newfoundland and Cape Bretton to northern New England, New York, and Michigan.

Occurrences have not been tracked in New Hampshire in recent years, however 16 historic occurrences are known from northern Coos County and the White Mountain region. Eleven or more of these occurrences were probably in the WMNF. One local expert has seen this species in the WMNF on the north side of the Presidentials in recent years. In Maine, it is documented in northern Oxford, Franklin, and Somerset Counties; none are on or near the WMNF.

Habitat

Galium kamtschaticum occurs in cool, wet woods, swamps, and streamsides. It occurs in hardwood, mixed, and conifer forests, with a preference for somewhat rich to rich forest. This species favors seep habitats with non-channelized flowing surface water, including seepages near streams. It can be under a full or partial canopy, but completely open conditions would probably create too much competition and impact seepage

The farther south you go, the more likely it is that this species is restricted to high elevations, but it occurs at moderate elevations (1500-2500') in northern habitats.

Limiting Factors

What limits this species and makes it rare throughout its range is unknown. Availability of cool seepy habitat, especially somewhat rich forest, is probably a limiting factor. Climate change could alter habitat conditions and impact the species.

Viability concern

The expert panel indicated that there is not enough information on this species' status to know if viability is a concern. However a national ranking of N3 indicates concern for the subspecies due to rarity. When documentation of occurrence on the WMNF is available, the N3 ranking will make it an automatic Regional Forester's Sensitive Species for the Forest.

Management activities that might affect viability

Since this species prefers cool, wet forests and at least partial canopy cover, it is likely that some types of timber harvest and any management that would affect local hydrology could impact populations. What canopy closure is preferred or is too open is unknown, but clearcut and seed tree harvests would probably open the forest too much, reducing shade and moisture and increasing temperature.

Beaver management and dam construction or removal near this species would be likely to affect local hydrology and could make habitat less suitable. Road and trail construction also could alter habitat suitability if they alter the hydrology of an area.

Ground-disturbing activities in suitable habitat would increase the potential for direct impacts to populations.

References

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